MIAMI-DADE COUNTY, FLORIDA
REQUEST FOR DESIGN-BUILD SERVICES
MIAMI DADE WATER AND SEWER DEPARTMENT
DESIGN-BUILD SERVICES FOR THE REPLACEMENT/REHABILITATION OF
72-INCH SANITARY SEWER FORCE MAIN ALONG
NORTHWEST/NORTHEAST 159TH STREET BETWEEN
NORTHWEST 17TH AVENUE AND NORTHEAST 10TH AVENUE
ISD PROJECT NO. DB14-WASD-01

The County Mayor, Miami-Dade County (County), pursuant to Section 287.055, Florida Statutes, 2-8.1 and 2-10.4 of the Miami-Dade County Code and Administrative Order 3-39, announces that design-build services required for are the Replacement/Rehabilitation of 72-inch Sanitary Sewer Force Main along Northwest/Northeast 159th Street between Northwest 17th Avenue and Northeast 10th Avenue for the Miami-Dade Water and Sewer Department.

The Design-Builder shall provide engineering, design, permitting, construction, testing and commissioning services for the implementation of the replacement/rehabilitation of the 72-inch sanitary sewer force main along Northwest/Northeast 159th Street between Northwest 17th Avenue and Northeast 10th Avenue. The design and construction services rendered by the Design-Builder shall result in a complete, functional, and operable piping project with a minimum of 80 year of design life. The Project shall consist of the following main elements:

- 1. Remove and salvage the existing 60-inch inline valves located at the intersection of Northwest 2nd Avenue and Northwest 159th Street. The salvaged valves will remain the property of Miami-Dade Water and Sewer Department (WASD).
- 2. Installation of two new 60-inch inline valves at the intersection of Northwest 6th Avenue and Northwest 159th Street and also at the intersection of North Miami Avenue and Northwest 159th Street. These valves will be procured by WASD forces.
- 3. Booster Pump Station 1310, located at Northwest 151st Street and Douglas Road, will be reconfigured or shutdown to allow discharge towards the suction header of Booster Pump Station 300, located at Northwest 30th Avenue and Northwest 127th Street. Pump Station 300 will to be evaluated to confirm ability to receive Design-Builder's proposed flow (based on the construction approach) and if necessary reconfigure to receive the additional flow from Booster Pump Station 1310.
- 4. Install an 8-inch temporary bypass for the existing North Miami Beach 8-inch force main connection to the existing 72-inch force main, located at the intersection of Northwest 16th Court and Northwest 155th Terrace.

- 5. Install an 8-inch temporary bypass for the existing City of North Miami 8-inch force main connection to the existing 72-inch force main located at the intersection of Northwest 2nd Avenue and Northwest 159th Street.
- 6. Install a 16-inch temporary bypass for the existing WASD 16-inch force main connection to the existing 72-inch force main located at the intersection of North Miami Avenue with Northwest 159th Street.
- 7. Approximately 6,400 linear feet of Class IV fully structural (to act as a separate pipe with the existing pipe acting as merely a right-of-way for the installation) Cure-in-Place Pipe (CIPP) application between North Miami Avenue and Northeast 10th Avenue. The preferred material for this CIPP application shall be furnished with a tube fabricated with non-woven synthetic fiber or non-woven synthetic fiber with fiberglass reinforced material and a vinyl ester or epoxy resin system which is compatible with the inversion process. The CIPP application shall be designed to withstand an internal pressure between 60 pounds per square inch (psi) to 65 psi.
- 8. Approximately 8,860 linear feet of Class IV fully structural (to act as a separate pipe with the existing pipe acting as merely a right-of-way for the installation) continuous slip lining with high density polyethylene (HDPE) application between Northwest 17th Avenue and North Miami Avenue. The preferred material for this sliplining operation is a 63-inch fusible high density polyethylene pipe, DR 32.5, manufactured from a pipe resin which meets ASTM D 3350 "Standard Specification for Polyethylene Plastic Pipe and Fittings Material" with a minimum cell classification of 445574C, manufactured to the dimensions of ASTM F 714 "Standard Specification for Polyethylene (PE) Plastic Pipe (S.D.R.-PR) Based on Outside Diameter" with a pressure rating between 60 psi to 65 psi.
- 9. Approximately 1,800 linear feet open cut construction to install a 60-inch pipe to interconnect sliplining operations between Northwest 17th Avenue and Northeast 2nd Avenue.

Additionally, the Design-Builder shall design and construct all ancillary piping, tapping, temporary bypass and tie-in connections to facilitate successful construction and commissioning the rehabilitated 72-inch sanitary sewer force main without interruption of service to the existing 72-inch sanitary sewer force main and its upstream and downstream pump stations, sewers and force mains.

The Design-Builder shall provide and pay for all labor, materials, tools, construction equipment and other ancillary facilities necessary for proper execution, testing, commissioning, and final restoration work required for functional and satisfactory delivery of the work. Any work and services which may be reasonably assumed as necessary to accomplish this objective shall be supplied by the Design-Builder.

- Substantial Completion Date is on or before 180 calendar days, after the date of Notice to Proceed, which requires putting into service the rehabilitated 72-inch sewer force main pipeline between Northwest 17th Avenue and Northeast 10th Avenue. No additional compensation will be made if the Design-Builder has to demobilize and remobilize before the Substantial Completion of the work due to this interim milestone.
- Final Completion Date on or before 240 calendar days after the date of Notice to Proceed which requires obtaining acceptance by all applicable regulatory agencies including WASD for all Work and Services under the Contract, all remaining site restorations, as-built drawings, record documents and all other remaining incomplete or unacceptable work items identified at or subsequent to Substantial Completion.

If the Design-Builder does not achieve Substantial Completion by the established Substantial Completion Contract Date, Liquidated Damages (LDs) will be assessed in the amount of \$10,000 per calendar day, which will be paid to the County by the Design-Builder. If the Design-Builder does not achieve Final Completion by the established Final Completion Contract Date, LDs will be assessed in the amount of \$2,500 per calendar day, which will be paid to the County by the Design-Builder. LDs will be cumulative if both the Substantial Completion Contract Date and the Final Completion Contract Date are exceeded. All assessments of LDs to the Design-Builder may be adjustments to payments due the Design-Builder.

The total maximum compensation for the Design-Build contract is \$20,890,368.80 which includes the following:

- \$17,050,730.00 estimated construction cost;
- \$ 1,705,073.00 estimated engineering cost;
- \$ 852,536.50 contingency fees for construction (5%):
- \$ 170,507.30 contingency fees for engineering (10%);
- \$ 600,000.00 dedicated allowance;
- \$ 511,522.00 permitting fees.

Firms providing engineering services must be certified in the following technical categories and the respective percentages of the disciplines as indicated below:

Technical Category No.	Description	Total Percentage	CBE Percentage
6.01 Prime	Water Distribution and Transmission	38	5
16.00 Prime	Civil Engineering	15	4

9.01	Soils, Foundations and Geotechnical Materials,	2	2
	Engineering Testing-Drilling,		
	Subsurface Investigations and		
	Seismographic Services		
9.02	Soils, Foundations and	2	1
	Geotechnical Materials		
	Engineering Testing		
9.03	Soils, Foundations and	1	1
	Materials Testing-Concrete and		
	Asphalt Testing Services		
9.04	Soils, Foundations and Materials	1	1
	Testing-Non Destructive Testing		
	and Inspection		
10.05	Contamination Assessment and	5	1
	Monitoring		
11.00	General Structural Engineering	27	2
15.01	Surveying and Mapping, Land	2	1
	Surveying		
15.03	Survey and Mapping	2	2
	Underground Utility Locations		
17.00	Engineering Construction	5	5
	Management		
	TOTAL	100%	25%

WASD is recommending a 25% CBE and 10% CSBE participation goal.

Minimum Experience and Qualifications for the Design-Builder, Lead Constructors and Lead Designers

Minimum Project Experience and Past Performance: The proposed Design-Builder shall demonstrate its project team experience by presenting the qualifications and capabilities of the Design-Builder, Lead Constructor(s) and Lead Designer(s) supported by listing projects completed within the last 10 years, including projects that are at least 50% complete, prior to the required submittal date of the solicitation, that demonstrate related minimum project experience as indicated below:

The proposed Design-Builder, including Lead Builder(s) and Lead Designer(s), any of which also may serve as the Design-Builder entity, shall be identified in the Proposer's Statement of Qualifications (SOQ) submittal. Experience and qualifications information must be included in the Internal Services Department Experience and Verification Chart(s) provided to be included with the RDBS.

1) Design-Builder:

I. The Design-Builder shall demonstrate that it has performed and/or managed as a Prime contractor or Design-Builder the construction of at least two (2)

pipeline rehabilitation projects, one of which was a minimum length of 1000 linear feet with a minimum 48-inch diameter.

II. The Design-Builder may also qualify for any of the Lead Constructor or Lead Designer requirements.

2) Lead Constructors:

- I. The Lead Constructor firm performing the Cure-In-Place-Pipe (CIPP) work must have constructed at least two (2) CIPP projects consisting of Class IV fully structural for pressure pipe, one of which was a minimum of 1000 linear feet and a minimum 48-inch internal diameter.
- II. The Lead Constructor firm performing the pit/shaft construction shall have constructed at least two (2) pits/shafts that were each at least 15-foot deep (below grade).
- III. The Lead Constructor firm performing the installation of the continuous slip lining must have constructed at least two (2) continuous slip lining projects with Class IV fully structural fusible high density polyethylene (HDPE) for pressure pipe, one of which was a minimum of 1000 linear feet, and a minimum 48-inch internal diameter.
- IV. The Lead Constructor firm performing the open cut installation of 60-inch pipe shall demonstrate having performed two (2) projects utilizing the open cut method with pipe of minimum 48-inches inside diameter, including one for a total installed length of at least 1,000 linear feet.
- V. Design-Build Team includes a firm having demonstrated experience with one (1) project of tapping into an operating sewer system pipe, of reasonably similar size and type. This firm may be a specialty subcontractor.

Lead Constructor(s) may qualify for one (1) or more of the above Lead Constructor requirements.

3) Lead Designers:

- I. The Lead Designer firm who will design the Cure In Place Pipe (CIPP) work must have designed at least two (2) CIPP projects consisting of Class IV fully structural for pressure pipe, one of which was a minimum of 500 linear feet and a minimum 48-inch internal diameter.
- II. The Lead Designer firm performing the design of the continuous slip lining must have designed at least two (2) with Class IV fully structural fusible HDPE for pressure pipe, one of which was a minimum of 500 linear feet and a minimum 48-inch internal diameter.

- III. The Lead Designer firm performing the design of the open cut installation of 60-inch pipe must have designed at least two (2) projects utilizing the open cut method with pipe of minimum 48-inches inside diameter, including one for a total installed length of at least 1,000 linear feet.
- IV. The Lead Designer firm performing design for the pits/shafts shall have designed one (1) deep pit/shaft project to support a rehabilitation operation of at least 15-foot deep (below grade).

Lead Designers may qualify for one (1) or more of the above Lead Designer requirements.

- A. Additional Preferred Project Experience and Past Performance: Design-Builder teams shall receive higher qualifications scores from the Competitive Selection Committee (CSC) if their submitted project experience and past performance can demonstrate the following:
 - I. Listed projects are of a similar or greater size and level of complexity.
 - II. Any listed projects of the proposed Design-Builder entity were designed and constructed through design-build project delivery.
 - III. The Lead Constructor and Lead Designer have worked together on previous projects, especially on design-build projects.
 - IV. Listed projects of the Lead Constructor and Lead Designer for the rehabilitation work include experience in reasonably similar urban conditions.
 - V. Listed projects demonstrate capabilities and experience of utilizing soil stabilization and grouting techniques for water control during boring and pit/shaft excavation. (This may be a specialty subcontractor)
 - VI. Key Personnel, most significantly the proposed Project Manager, Design Manager and Construction Manager, have served on the Projects listed and their client reference can validate that performance.
- B. Minimum industry and position experience of Design-Build Team Key Personnel are as follows:
 - Minimum Fifteen (15) years total industry experience of which five (5) years in a similarly responsible position for each of the following Key Personnel:
 - Design-Build Project Manager
 - Lead Designer Design Manager
 - Lead Constructor Construction Manager

- ➤ Pits/Shafts Construction Superintendent
- Minimum ten (10) years total industry experience of which three (3) years is in a similarly responsible position for each of the following key personnel:
 - Lead Structural Engineer
 - Lead Geotechnical Engineer
 - ➤ Lead Pipeline/Mechanical Engineer
 - Pipe Tapping Superintendent
 - Permitting / Compliance Manager
 - Design-Builder Quality Assurance/Quality Control (QA/QC) Manager
 - Design-Builder Safety Manager
- * Key Personnel must demonstrate experience with the type work to be performed.
- Proposers shall identify, in their SOQ, those State of Florida registered Professional Engineers who will sign and seal construction plans and specifications.
- ➤ Key Personnel resumes shall indicate the individual's current firm association, their professional qualifications, a client reference with contact information, and their role and duration on each project for which they are being credited the related experience.

Additional Preferred Experience and Past Performance:

- Experience in significant role on a design-build project, especially in a similar role as proposed for this Project
- Superior references with regard to meeting cost, schedule, and quality objectives on previous projects, and maintaining a positive client relationship.
- 4) Design-Builder Safety Record minimum past performance as reflected by a three (3) year average for the last three (3) previous full years of the Experience Modification Rate (EMR) for the Design-Builder and Pits/Shafts Constructor shall not exceed 1.10 for each firm.
 - Design-Builders shall provide EMR data for the previous three (3) full calendar years (2010, 2011, and 2012) on a firm-wide basis shall be documented by a signed letter with contact information from the firm's insurance carrier, or the insurance carrier's agency representative. Higher qualifications score shall be provided by the CSC for a Design Builder demonstrating an average EMR lower than other competing Design-Builder firms. Design-builder shall also provide their OSHA forms 300 and 300A for the last three (3) full calendar years indicating OSHA submitted accident data for evaluation by the CSC as to their frequency and severity.

5) Ability of Design-Builder and Team to interface with the County Design-Builder Proposer will provide a narrative of not more than three (3) single side 8 1/2 x 11-inch pages, in not less than Arial 11 pt font and 3/4-inch margins, that explains how the Design-Builder and team members can efficiently interface with the County and WASD in a timely and effective manner with respect to items such as regular and emergency communications, submittals, meeting attendance, commercial issues and other project related activities.

The expertise must be met by a qualified individual(s) of the Prime firm and its subconsultants. The experience must be demonstrated by direct or substantial involvement of the individual(s) in a supervisory capacity at the Project Manager level or above. The determination of the individual's qualifications and compliance with the experience and qualifications shall be at the sole discretion of the County. The Competitive Selection Committee may negatively evaluate proposals from firms they determine have failed to meet the above experience and qualification(s).

